MATERIAL SAFETY DATA SHEET

SECTION 1. - - - - - - - CHEMICAL IDENTIFICATION - - - - - - - -

PRODUCT #: P1767
NAME: POTASSIUM HYDROXIDE PELLETS

SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - -

CAS #: 1310-58-3
ME: H1K1O1
SYNONYMS:
- CAUSTIC POTASH
- HYDROXYDE DE POTASSIUM (FRENCH)
- KALIUMHYDROXID (GERMAN)
- KALIUMHYDROXIDE (DUTCH)
- LYE
- POTASSA
- POTASSE
- CAUSTIQUE (FRENCH)
- POTASSIO (ITALIAN)
- POTASSIUM HYDRATE
- POTASSIUM HYDROXIDE
- SOLID (UN1813) (DOT)
- POTASSIUM HYDROXIDE, SOLUTION (UN1814) (DOT)
- POTASSIUM (HYDROXYDE) (FRENCH)
- UN1813 (DOT) * UN1814 (DOT)

SECTION 3. - - - - HAZARDS IDENTIFICATION - - - -

LABEL PRECAUTIONARY STATEMENTS
CORROSIVE
CAUSES BURNS.
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
REACTS VIOLENTLY WITH WATER.
IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING.
WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION.

SECTION 4. - - - - - - FIRST-AID MEASURES - - - - - - - -

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES.
ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN IMMEDIATELY.
DISCARD CONTAMINATED CLOTHING AND SHOES.

SECTION 5. - - - - FIRE FIGHTING MEASURES - - - - - - - -

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: 01767
NAME: POTASSIUM HYDROXIDE PELLETS
NF: HXK101

CUST#: 2-097-94016
PO#: 0961085

EXTINGUISHING MEDIA:
NOCOMBUSTIBLE.
USE EXTINGUISHING MEDIA APPROPRIATE TO SURROUNDING FIRE CONDITIONS.
DO NOT USE WATER.

SPECIAL FIREFIGHTING PROCEDURES:
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES.
REACTS VIOLENTLY WITH WATER.
UNUSUAL FIRE AND EXPLOSIONS HAZARDS.
EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. — — — — — ACCIDENTAL RELEASE MEASURES — — — — — — —
EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY RUBBER GLOVES.
SHEEP UPS PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID Raising DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. — — — — — HANDLING AND STORAGE — — — — — — — — — — — — — — —
REFER TO SECTION 8.

ADDITIONAL INFORMATION:
DANGER: UNDER FIRE CONDITIONS MATERIAL WILL MELT AND FLOW. MOLTEN MATERIAL REACTS VIOLENTLY WITH WATER AND CAN REACT WITH ALUMINUM, TIN, ZINC AND THEIR ALLOYS TO GENERATE FLAMMABLE AND EXPLOSIVE HYDROGEN GAS. POTASSIUM HYDROXIDE REACTS WITH TRICHLOROETHYLENE TO FORM SPONTANEOUSLY FLAMMABLE DICHLOROACETYLENE.

SECTION 9. — — — — — EXPOSURE CONTROLS/PERSONAL PROTECTION — — — — —
WEAR APPROPRIATE NIOSH/OSHA-APPROVED RESPIRATORS, CHEMICAL-RESISTANT GLOVES, SAFETY GLASSES, OTHER PROTECTIVE CLOTHING.
SAFE HANDLING AND EYE BATH.
USE ONLY IN A CHEMICAL FUME HOOD.
FACE SHIELD (A-RICH MINIMUM).
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.

CONTINUED ON NEXT PAGE
CUST#: 2-097-94816
PU#: 061085

PRODUCT #: P1767
NAME: POTASSIUM HYDROXIDE PELLETS
MF: HIKI01

AVOID PROLONGED OR REPEATED EXPOSURE.
WASH THOROUGHLY AFTER HANDLING.
CORROSIVE.
TOXIC.
KEEP TIGHTLY CLOSED.
DO NOT ALLOW CONTACT WITH WATER.
STORE IN A COOL DRY PLACE.

SECTION 9. --- --- --- PHYSICAL AND CHEMICAL PROPERTIES --- --- ---
APPEARANCE AND ODOR
SOLID.
MELTING POINT: 361 C
VAPOR PRESSURE: 1MM 719 C
SPECIFIC GRAVITY: 2.044

SECTION 10. --- --- --- STABILITY AND REACTIVITY --- --- ---
STABILITY.
STABLE.
INCOMPATIBILITIES.
ACIDS.
ALUMINUM HALOGENS.
NITRO COMPOUNDS.
ORGANIC MATERIALS.
ACID CHLORIDES.
ACID AMYORIDES.
MAGNESIUM.
COPPER.
TIN.
ZINC.
DO NOT HEAT ABOVE MELTING POINT.
PROTECT FROM MOISTURE.
ABSORBS CO2 FROM AIR.
REACTS VIOLENTLY WITH:
WATER.
GENERATES FLAMMABLE AND/OR EXPLOSIVE HYDROGEN GAS IN CONTACT WITH:
METALS.
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

CONTINUED ON NEXT PAGE
HAZARDOUS POLYMERIZATION
WILL NOT OCCUR.

SECTION 11. --- --- --- --- --- -- TOXICOLOGICAL INFORMATION -- --- --- --- --- ---

ACUTE EFFECTS
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
MATERIAL IS EXTREMELY Destructive TO TISSUE OF THE MUCOUS MEMBRANES
AND UPPER RESPIRATORY TRACT, EYES AND SKIN.
INHALATION MAY BE FATAL AS A RESULT OF SPASM, INFLAMMATION AND EDEMA.
OF THE LARYNX AND BRONCHI, CHEMICAL PNEUMONITIS AND PULMONARY EDEMA.
SYMPTOMS OF EXPOSURE MAY INCLUDE BURNING SENSATION, COUGHING,
WHEEZING, LARYNGITIS, SHORTNESS OF BREATH, HEADACHE, NAUSEA AND
VOMITING.

RTECS NO: IT3100000
POTASSIUM HYDROXIDE (ACGIN)

IRRITATION DATA
SKIN-RAT 30 MG/24H SEV
SKIN-ROD 50 MG/24H SEV
EYE-RAT 1 HG/24H RINSE MOD.
SKIN-6PG 90 MG/24H SEV

TXAPA9 31,401,75
TXAPA9 31,401,97
TXAPA9 32,239,75
TXAPA9 31,401,75

TOXICITY DATA
DRL-RAT LD50: 273 MG/KG
FAITOF 8,997,97

ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. --- --- --- --- --- -- ECOLOGICAL INFORMATION -- --- --- --- --- ---

DATA NOT YET AVAILABLE.

SECTION 13. --- --- --- --- --- -- DISPOSAL CONSIDERATIONS -- --- --- --- --- ---

CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.

SECTION 14. --- --- --- --- --- -- TRANSPORT INFORMATION -- --- --- --- --- ---

CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.

CONTINUED ON NEXT PAGE
MATERIAL SAFETY DATA SHEET

PRODUCT #: 01767
NAME: POTASSIUM HYDROXIDE PELLETS
MP: MIKI101

SECTION 15. --- --- --- --- REGULATORY INFORMATION --- --- --- ---

REVIEW STANDARDS AND REGULATIONS
AGCIH TLV-CL 2 mg/m³
EPA FIFRA 1988 PESTICIDE SUBJECT TO REGISTRATION OR RE-REGISTRATION
ERECAC 54, 774, 89
DEL-AUSTRIA:TWA 2 mg/m³ JAN93
DEL-BELGIUM:STEL 2 mg/m³ JAN93
DEL-DENMARK:TWA 2 mg/m³ JAN93
DEL-FINLAND:TWA 2 mg/m³ JAN93
DEL-FRANCE:STEL 2 mg/m³ JAN93
DEL-JAPAN:STEL 2 mg/m³ JAN93
DEL-THE NETHERLANDS:TWA 2 mg/m³ JAN93
DEL-SWITZERLAND:TWA 2 mg/m³ JAN93
DEL-UNITED KINGDOM:TWA 2 mg/m³; STEL 2 mg/m³ JAN93
DEL IN BULGARIA, COLOMBIA, JORDAN, KOREA CHECK AGCIH TLV
DEL IN NEW ZEALAND, SINGAPORE, VIETNAM CHECK AGCIH TLV
NIOSH REF TO POTASSIUM HYDROXIDE: AIR:CL 2 mg/m³
NIOSH: NIOSH 73-100, 92
NOES 1975: N20 604,401; NIS 340; TNE 805,210; NOS 181; TNE 108,155
NOES 1983: N20 375,831; NIS 11; TNE 543; NOS 16; TNE 672,21; TFE 2,651
NOES 1993: N20 394,401; NIS 330; TNE 671,02; NOS 213; TNE 16,837,43; TFE 6,878,95
EPA TSCA CHEMICAL INVENTORY, JUNE 1993
EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JULY 1994
NIOSH ANALYTICAL METHOD, 1994: ALKALINE BUSTS, 7401

SECTION 16. --- --- --- --- OTHER INFORMATION --- --- --- ---

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